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ABSTRACT

The use of an expectancy-value model, common to consumer marketing studies, in analyzing the market position of Cleveland State University was investigated. Attention was focused on showing how consumer attitude concepts and methodologies can be used in developing a strategic marketing plan. Six populations were identified as groups important to the university and its future: general population from a six-county area, undergraduate students at the university, those accepted for graduate school, parents of undergraduates, college bound high school seniors, and high school teachers and counselors. All data were gathered via telephone surveys conducted by a marketing research firm. Based on responses from 1,850 individuals, the university was generally perceived as being geographically and economically convenient, offering an adequate education, but lacking in safety, academic stature, and the social benefits of living away from home. The expectancy-value model was found to be a useful method. Its use identified discrepancies between perceptions of those closest to the university and those least familiar with it that have relevance to the university's overall marketing effort. Application and enrollment gains can possibly result from a better understanding in the community at large as to the high quality of the university's underrated faculty and programs. Graphs illustrate the attitudes of the respondent groups regarding: the need for high quality professors, academic reputation, numerous course offerings, the range of degrees offered, personal safety on campus, and the availability of a university close to home. (SW)

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THE USE OF AN EXPECTANCY-VALUE MODEL
IN STUDYING A UNIVERSITY'S IMAGE

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This paper was presented at the Twenty-Second Annual Forum of the Association for Institutional Research held at the Denver Hilton Hotel in Denver, Colorado, May 16-19, 1982. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum papers.

D. R. Coleman, Chairman
Forum Publication
Advisory Committee

Abstract

The paper demonstrates the use of an expectancy-value model, common to consumer marketing studies, in analyzing the market position of an urban university. Using data gathered from 1,850 respondents among six different constituent groups, it describes how various institutions of higher education are positioned in the minds of the public as to important attributes of colleges and universities. Such data are then utilized to show how changes in perceptions could lead to changes in postsecondary attendance patterns among the populace surveyed.

THE USE OF AN EXPECTANCY-VALUE MODEL
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Introduction

In recent years, much attention within higher education has been focused on the discipline of marketing, particularly as it relates to the admission and retention of students. Educators' adoption of relevant marketing methods has been hindered, however, by two major obstacles: (1) their limited view of marketing as addressing only advertising issues, and (2) their lack of experience in adapting marketing principles and techniques to the higher education environment. The definitional problem of what constitutes marketing is frequently addressed by proponents of its use in colleges and universities, particularly when the audience is composed primarily of trustees, presidents, and other decision-makers in higher education. Their general approach is to show that marketing is much broader than simply advertising, so that the marketing concept can be adapted to the academic, non-profit sector without violating the different underlying value systems in higher education.

The adaptation of marketing principles and techniques to higher education is necessarily a more step-by-step process. Even the most marketing oriented decision-maker requires conceptual and methodological tools to guide the decision process, and these must be adapted from other fields and communicated to the managers (including faculty and staff) in higher education. This study adds to the body of knowledge concerning marketing in higher education by demonstrating the use of an expectancy-value model in determining the market

position of a particular university. The benefits and drawbacks of the use of such a model in a university environment are discussed, as are methods of stimulating the impact on enrollment of different policy decisions.

Purpose

The purpose of the paper is to demonstrate the use of an expectancy-value model, common to marketing studies, in analyzing the market position of an urban university. The paper focuses on showing how consumer attitude concepts and methodologies can be utilized to aid an institution of higher education in developing a strategic marketing plan.

Literature Review

Marketing is not new to non-profit organizations such as colleges and universities, but only recently has the term properly been used to encompass the many components of marketing thought. Kotler's (1975) efforts at broadening the adoption of the marketing concept to institutions of higher learning, among other non-profit organizations, occurred at the same time that colleges and universities were faced with a shrinking market of students in the 18-22 year-old range. The maturation and expansion of the marketing discipline has conveniently coincided with its need in the postsecondary sector, generating a great deal of attention from both marketers and educators (Barton, 1978; Litten, 1980; Lucas, 1979).

To date, the majority of literature about marketing in higher education has been of a general nature, describing what it is, and what it is not, to sometimes suspicious educators (Knight and Johnson, 1981). It is essential to inform these generalists and

policy makers as to the value of adopting a marketing orientation, but for marketing to be useful in the day-to-day operation of institutions, educators must go beyond generalities to specific principles and methodologies.

One of the most widely known and useful marketing management processes to gain attention in recent years has been that of strategic planning, which itself was borrowed from management planning and its antecedent disciplines (Cope, 1981). As Cope summarizes it, strategic planning is the process of focusing on six conditions necessary to assure an entity's (e.g. college's or university's) vitality in turbulent environments (e.g. the 1980's). The conditions include:

- (1) Centers of distinctive strength with internal and external links.
- (2) Pivotal locations -- geographic and technological.
- (3) Quality products.
- (4) Permeable boundaries related to segmented markets.
- (5) A majority of staff employed in substructures having adaptive functions.
- (6) Executive level encouragement to develop new products. (Cope, 1981, p. 1)

Key elements of strategic planning as defined by Cope consequently include institutional self-study, which is the traditional role of the institutional researcher, and what Young (1981) calls the "empirical investigation of a changing environment." In other words, one must determine what the educational product is and what the potential consumers want, as well as what they might want in the future, as part of the strategic planning process. The institutional researcher is one of the obvious choices as the person capable of directing the marketing research effort needed to support the strategic planning of a college or university.

A particularly useful model for application to higher education issues is the expectancy-value model which is frequently utilized

in consumer attitude studies (Kotler, 1975; Murphy, 1981). The pioneering work in attitude modeling by Rosenberg (1956) and Fishbein (1963) has been extended to include marketing applications in profit and non-profit organizations (Wilkie and Pessemier, 1973). Attributes of products (e.g. universities) are measured in terms of: (1) their importance to buyers (e.g. potential students, other constituents) and (2) whether they are associated with specific products (e.g. universities).

Application of the expectancy-value model in higher education requires the specification of a set of traits deemed desirable or undesirable of a university, such as good academic reputation or poor social life. Then, a potential student is asked to rate the importance of each trait to him or her individually on an eleven-point scale (-5 to +5). Next, the respondent is asked to rate a group of colleges and universities, including the one sponsoring the study, as to how much each institution is associated with each trait. The resulting scores for each trait, i.e. degree of importance times degree of association, are added to compute each respondent's overall institutional score for each college or university. The institution with the highest score for a particular respondent is the one at which that student is most likely to enroll, if admitted. The model, as described here, is summarized in Kotler (1975, pp. 146-149).

The theory underlying the expectancy-value model is that the way a product, such as a university, is perceived can be measured, and that the student choice outcome can be predicted from a summation score derived from those measures. Implicit also is the idea that perceptions of institutions can change, and sufficient change in perceptions can cause changes in student choice. If the desired

change from the institution's point of view is increased applications and/or enrollments, then the expectancy-value model holds both theoretical and practical promise.

Methodology and Data Sources

The design of the study was similar to those used to measure purchase preferences among consumers, though its aim was broader in scope than many consumer studies. The intent of the study was to measure the image and resulting market position of Cleveland State University among its various constituencies, not just those who are potential students. Since the student enrollment decision process is influenced by a variety of individuals, it was deemed important to know how other key people perceive the university. In addition, at an urban commuter institution such as Cleveland State, it is difficult to identify the population of all potential students due to the wide range of age and other demographics represented in the student body.

Six populations were identified as constituting groups important to the university and its future. The following samples were drawn randomly from the populations identified: general population from a six county area, weighted by county (1,050); undergraduate students at Cleveland State University (C.S.U.) (200); those accepted for graduate school at C.S.U. (100); parents of undergraduate students at C.S.U. (200); college-bound high school seniors (100); and high school teachers and counselors (200). All data were gathered via telephone surveys, conducted by a marketing research firm. The average telephone call lasted between 20 and 25 minutes.

Although each constituent group had its own questionnaire, some

questions were common to all while other questions were common to two or more. The questionnaires consisted of three types of questions: those involving awareness, attributes, and demographics. The awareness questions asked respondents to name local colleges and universities that came to mind. The purpose of these questions was to determine the degree of unaided awareness that respondents have of C.S.U. Institution awareness also serves as a guide for comparing schools based on attribute ratings. In other words, it points up top-of-mind, competitive sets of schools among the various respondents.

The attribute questions were the most critical to the study. They were developed by soliciting important attributes of a college or university from faculty, administrators, and students. The exhaustive list was reduced by eliminating most of the duplicate questions, though a few which were worded differently were kept to check for reliability. Specific attribute questions most important to the specific group responding were then incorporated into each questionnaire.

The demographic portion of the surveys consisted of fairly standard questions about age, sex, race, and income. Each survey instrument was pretested with samples of ten respondents before the actual data collection began. University personnel were involved in every stage of sample selection and survey construction.

Results

Two types of results were found to be most helpful to the university in analyzing its current market position. The internal approach looked at the importance of certain attributes and how well

C.S.U. is associated with those attributes. The external analysis examined C.S.U. versus other local colleges and universities, based on the derived attitude scores (importance x attribute association).

Many of the strengths of the university, as perceived by the various groups, came as little surprise to those long familiar with C.S.U. It is perceived as having a convenient, downtown location, charging relatively low tuition, offering a variety of courses and programs, having modern facilities and offering a wide range of degrees. Some of its strengths are also perceived as weaknesses. For example, the downtown location is associated with crime, a commuter college with little dormitory space is seen as a detriment by many, and the urban environment makes parking more difficult. The more qualitative questions concerning faculty and programs generated responses of an adequate, but not outstanding nature. In other words, those surveyed felt that the university's quality of education is acceptable for an urban, state university.

Interestingly, the perceptions of the six groups surveyed were similar as to the importance given to various attributes, but quite different in their degree of association with C.S.U. In examining Figure 1, for example, it appears that the groups all place a heavy emphasis on high quality professors. In the general population and among college-bound high school seniors, however, less than half of the people surveyed associated that trait with C.S.U. Current students, on the other hand, are generally positive concerning the high quality of faculty. While some would argue that current students feel this way because they are self-selected and are trying to lower what marketers call "post-purchase dissonance" (Gist, 1971, p. 438), these results suggest a gap that might be shrunk to the

benefit of the university.

- - - PLACE FIGURES 1 AND 2 HERE - - -

Another attribute important to the groups studied is academic reputation. As can be seen in Figure 2, there are substantial gaps between those who know the university well and those who do not. Figures 3 and 4 show less dramatic differences regarding the two traits: numerous course offerings and range of degrees offered. Figure 5 demonstrates that campus safety produces greater discrepancies among the group ratings than any other trait, again with those least likely to know the university well associating it less with personal safety. Figure 6 shows that college-bound high school seniors differ from the other groups concerning the importance of a college or university being close to home.

- - - PLACE FIGURES 3 - 6 HERE - - -

To summarize, the university is generally perceived as being geographically and economically convenient, offering an adequate education, but lacking in safety, academic stature, and the social benefits of living away from home. There are substantial differences, however, between those who know it best and those who know it least, with the former group being much more positive than the latter.

The data concerning other local colleges and universities were similar, in many respects, to the data concerning C.S.U. However, the older, more established private institutions are seen as being of higher academic quality, and the community colleges are perceived as less prestigious. Safety is measured by distance from downtown, with the suburban campuses being rated as safest. The institutions

whose profiles are closest to that of C.S.U., the "competition," are not-too-distant state universities with residential facilities and local private institutions with moderate admissions standards and tuition costs.

Discussion

The public perceptions of C.S.U. were not unexpected, but there were some surprises. The fact that current students and their parents view the university in a positive way is encouraging. Many admit that they attend C.S.U. for convenience reasons, including the ability to work and attend college simultaneously, but they also seem to be positive regarding the quality of education received once they matriculate. Even in light of the caveats mentioned above, these findings suggest that there is a gap between the university's product and its perception among many constituents, especially the general public and potential students, that might be lessened to the benefit of the university. The safety issue is an anti-downtown bias of which the university is well aware, and the views of current students suggest that past efforts in this area have lessened the concerns of those who are familiar with the campus.

One of the most difficult issues for the university to address is the desire of many 18-22 year old students to live away from home while attending college. With limited dormitory space (roughly 210 spaces for over 19,000 students) and little chance of major expansion in the near future, there appears to be a limited attraction of C.S.U. to students who wish to live away from home. The importance of this attribute may change for some students in light of the current economic environment, but this is difficult to predict.

The gap between external perception and internal reality as to academic environment is suggested by the data concerning other institutions as well. C.S.U.'s faculty is at least as qualified, and in some cases more qualified according to traditional academic criteria, than other local colleges and universities, yet the external publics seem unaware of the facts. While this discovery suggests needed perceptual improvements in the future, it causes difficulties and frustrations in competing for students in the present. It appears that a long history and high tuition costs create an aura of higher quality around the local private institutions than around the public ones, including C.S.U. In addition, high admission standards suggest quality to the public; easy entry is identified with easy exit, regardless of the realities.

In light of these results, practical action can be guided by the expectancy-value model. The greatest increases in total institutional or product score are generated by increasing the public's perception of those attributes considered to be most important, in this case quality of faculty, academic reputation, and campus safety, especially if gaps appear between public perception and institutional reality. Increasing awareness of the university is not the problem, since most of those surveyed are aware of its existence. What is needed is a concentrated effort aimed at informing the university's constituencies as to its underrated strengths.

A major drawback to the use of the expectancy-value in higher education has to do with its underlying assumptions. The model is adapted from studies of consumer buying which usually concentrate on items which are purchased frequently. Although it has been used for studies of major purchases, such as homes (Park, Hughes, Thukral, and

Friedmann, 1981), it is more difficult to predict the consumer behavior of major purchases because of the emotionalism involved. Attending a college or university is more like buying an automobile than toothpaste or jelly, so similar restrictions apply to the use of the model in postsecondary education.

A more fundamental criticism of the model as described here has to do with validation. In an ideal situation, attribute importance and association are measured prior to a purchase, then purchase decisions are matched to the behavior predicted by the model. The study described above did not, by its nature, allow for testing the hypothesis that a shift in perception would lead to a change in purchase, i.e. enrollment, behavior. Usefulness of the results is further complicated by the fact that many of those surveyed were not potential students. One must therefore question the benefit of shifting their perceptions unless they are potential influencers. In short, this study did not provide information to determine whether or not changing the public image on the important attributes will in fact affect enrollment. Nevertheless, these results do suggest a direction in which the university might proceed regarding the elements of its marketing program.

Conclusion

The expectancy-value model, despite its limitations for use in higher education, proved to be quite useful at one urban, public university. Its use has pointed up discrepancies between perceptions of those closest to the university and those least familiar with it that give direction to the university's overall marketing effort. Application and enrollment gains can possibly result from a better

understanding in the community at large as to the high quality of the university's underrated faculty and programs. An added bonus is that such an effort, if properly done, would be appealing to the faculty, staff, and students.

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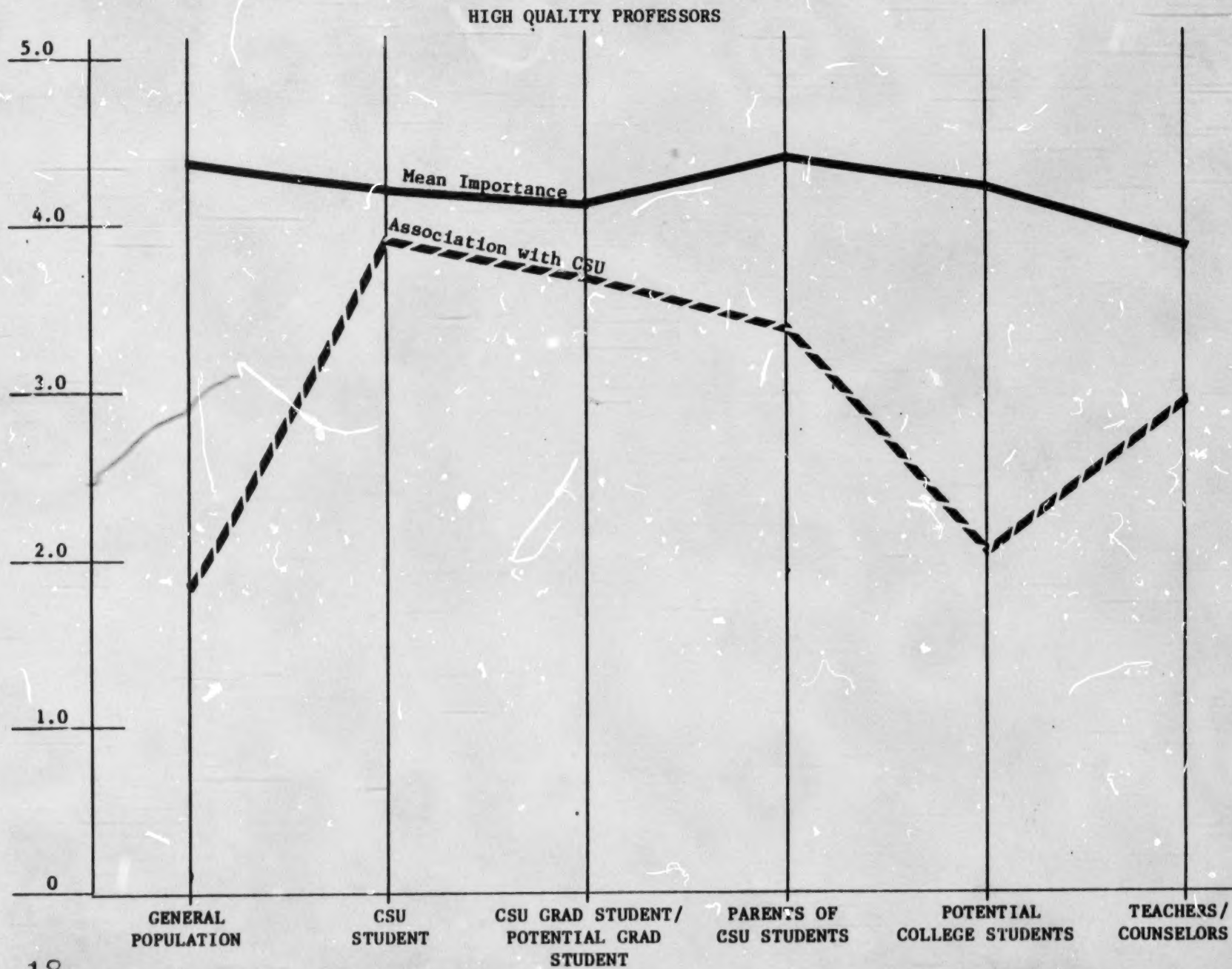


Figure 1
A Comparison of Group Attitudes Towards
the Need for High Quality Professors

Figure 2
A Comparison of Group Attitudes Towards the Possession of an Excellent Academic Reputation

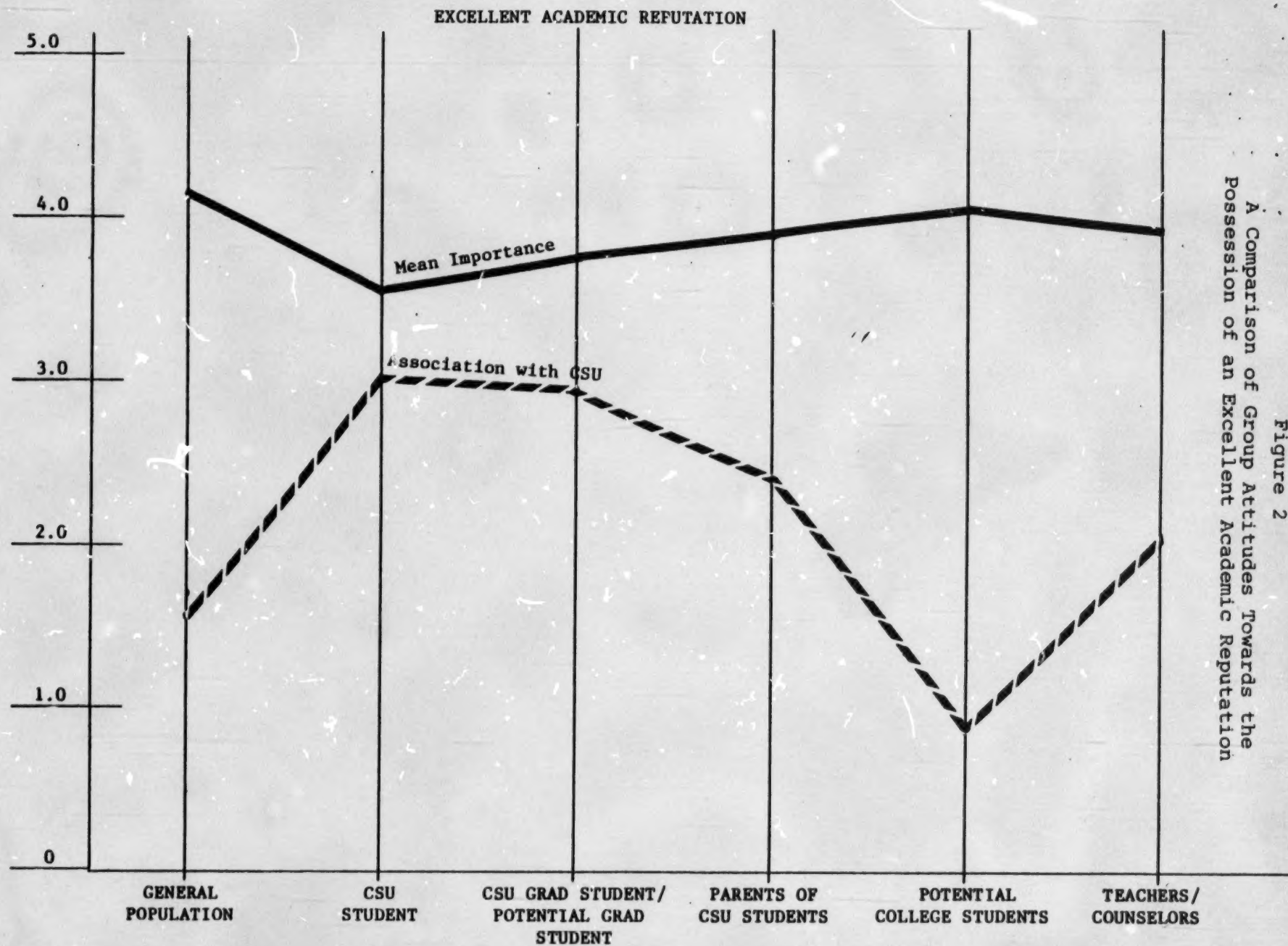
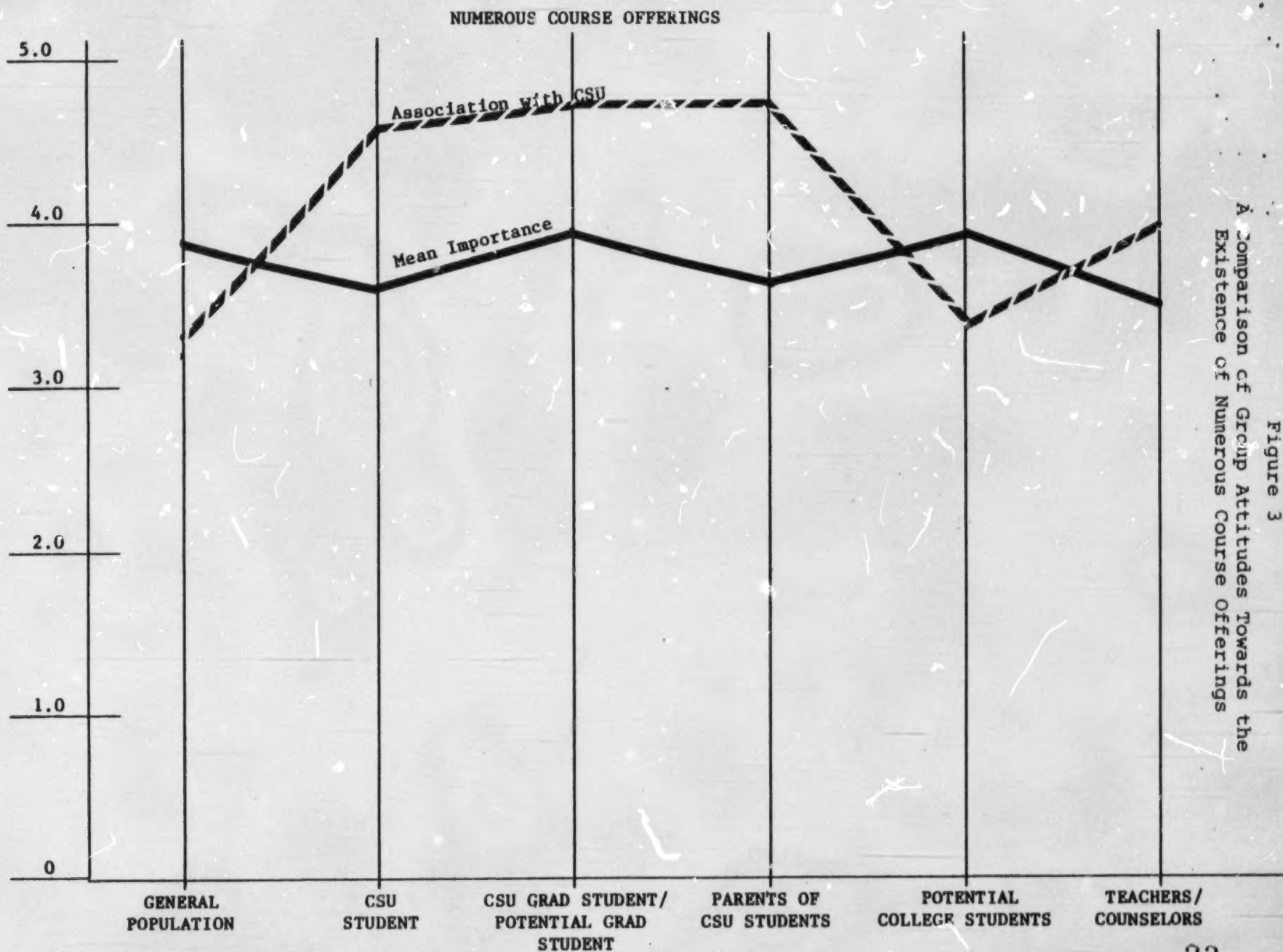


Figure 3
A Comparison of Group Attitudes Towards the
Existence of Numerous Course Offerings



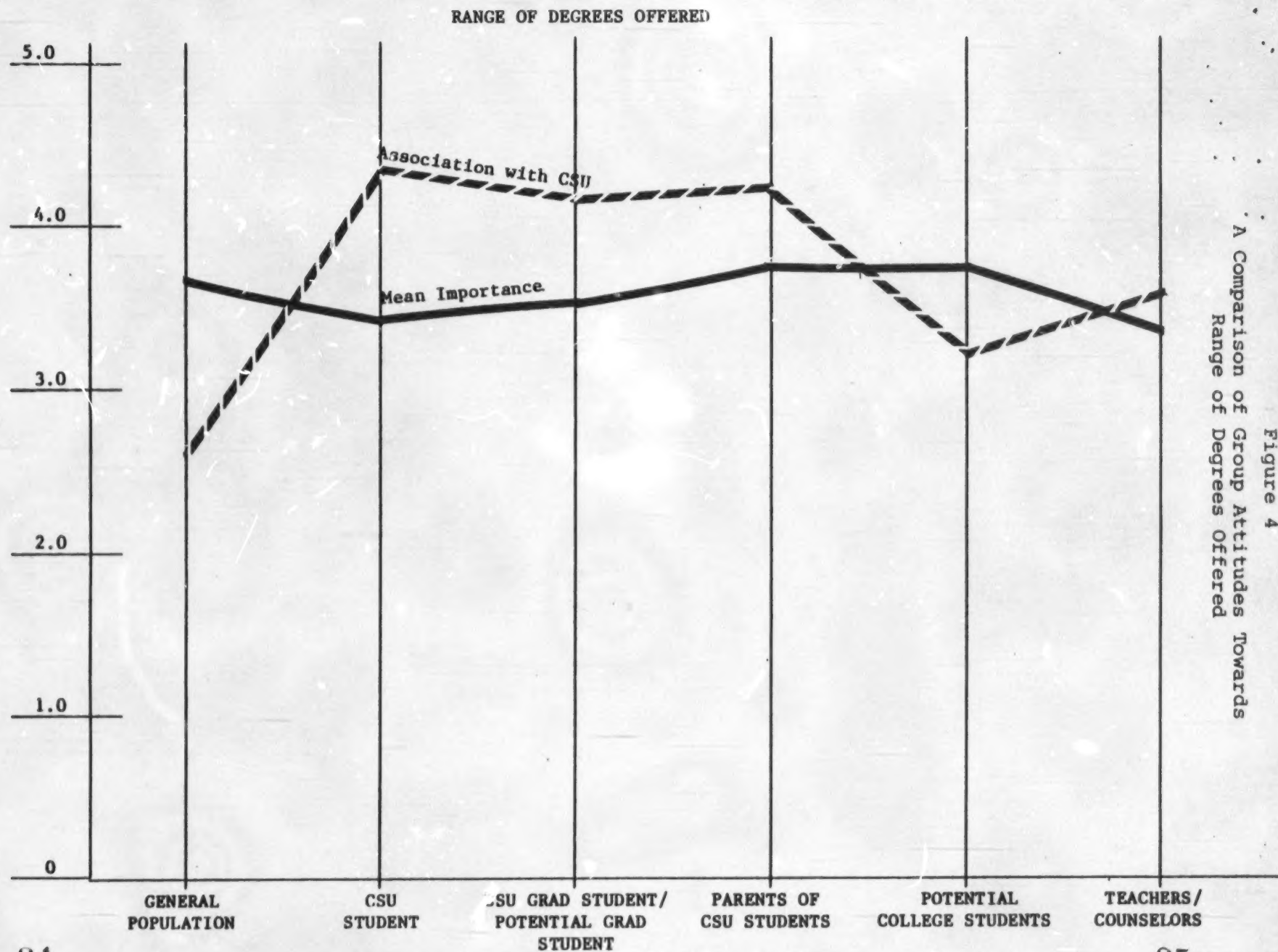


Figure 4
A Comparison of Group Attitudes Towards
Range of Degrees Offered

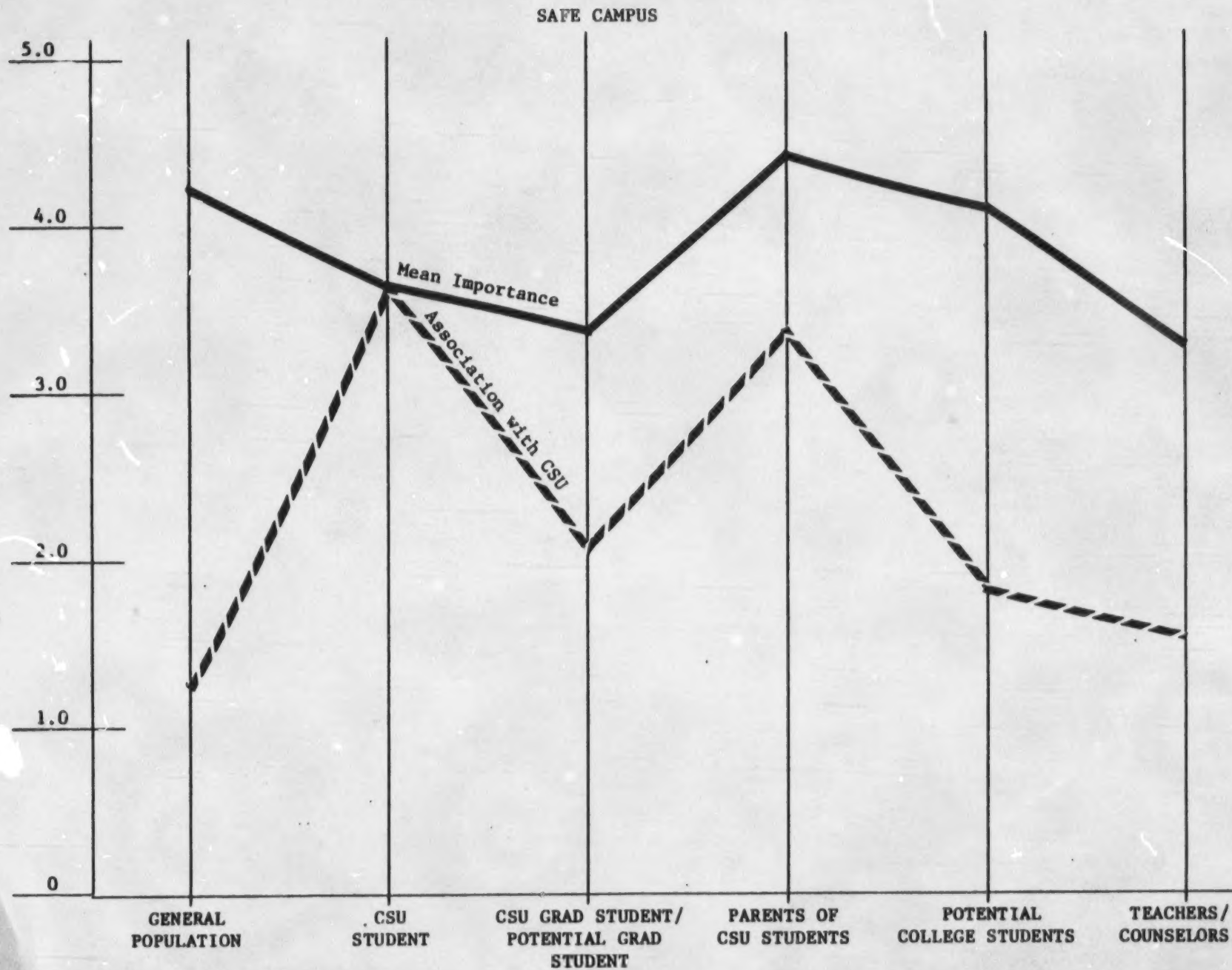


Figure 5
A Comparison of Group Attitudes Towards
Personal Safety on Campus

Figure 6
A Comparison of Group Attitudes Towards the
Availability of a University Close to Home

